

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 4, 5, 7, 11, and 12 as follows. All claims currently pending in this application are reproduced below.

1. (Currently Amended) An image processing apparatus, comprising:
~~an input unit that inputs unit, arranged to input successive image data;~~
~~a first detection unit that detects unit, arranged to detect a change between in~~
the successive image data;
~~a second detection unit, arranged to detect a color of the successive image~~
~~data;~~
~~a scene change detection unit, arranged to detect a scene change in the~~
~~successive image data;~~
~~a generation unit that generates unit, arranged to generate initial contour~~
information for extracting an object existing in the image data, in accordance with ~~an~~
~~output of said detection unit and a color of the image data outputs of said first detection~~
~~unit, said second detection unit, and said scene change detection unit;~~ and
~~an extraction unit that extracts unit, arranged to extract object image data~~
corresponding to the object on the basis of the initial contour information generated by said
generation unit.

2. (Previously Presented) An image processing apparatus according to
claim 1, further comprising a coding unit that encodes the object image data extracted by
said extraction unit.

3. (Previously Presented) An image processing apparatus according to claim 2, further comprising a transmission unit that transmits the image data encoded by said coding unit.

4. (Currently Amended) An image processing apparatus according to claim 1, wherein the image data input by said input unit include data picked up by a video camera, said input unit inputs parameter data concerning a camera parameter of the video camera, and said scene change detection unit detects a change between the successive in image data based on the parameter data.

5. (Currently Amended) An image processing apparatus according to claim 4, wherein said scene change detection unit performs different detection processing in accordance with the parameter data.

6. (Previously Presented) An image processing apparatus according to claim 4, wherein said input unit includes the video camera.

7. (Currently Amended) An image processing apparatus according to claim 1, wherein ~~said generation unit includes a first area-division unit that performs area division based on color, and a second area-division unit that performs area division based on motion of image data, and generates the initial contour information in accordance with outputs from said first and second area-division units a unit of detection of said first detection unit is greater than that of said second detection unit.~~

8. (Previously Presented) An image processing apparatus according to claim 7, further comprising a display unit that displays image data input by said input unit, wherein said display unit can display an extraction result of said extraction unit so as to visually check the extraction result.

9. (Previously Presented) An image processing apparatus according to claim 2, wherein said coding unit performs coding processing complying with MPEG-4 (ISO/IEC 14496).

10. (Previously Presented) An image processing apparatus according to claim 2, further comprising a recording unit that records image data encoded by said coding unit on a recording medium.

11. (Currently Amended) An image processing method comprising the steps of:

an input step of inputting successive image data;
a first detection step of detecting a change between in the successive image data;
a second detection step of detecting a color of the successive image data;
a scene change detection step of detecting a scene change in the successive image data;

a generation step of generating initial contour information for extracting an object existing in the image data; data in accordance with an output of said detection step and a color of the image data outputs of said first detection step, said second detection step, and said scene change detection step; and

an extraction step of extracting object image data corresponding to the object on the basis of the initial contour information generated in said generation step.

12. (Currently Amended) A storage medium which stores computer readable program codes for executing image processing steps, including:

an input step of inputting successive image data;
a first detection step of detecting a change between in the successive image data;
a second detection step of detecting a color of the successive image data;
a scene change detection step of detecting a scene change in the successive image data;

a generation step of generating initial contour information for extracting an object existing in the image data; data in accordance with an output of said detection step and a color of the image data outputs of said first detection step, said second detection step, and said scene change detection step; and

an extraction step of extracting object image data corresponding to the object on the basis of the initial contour information generated in said generation step.